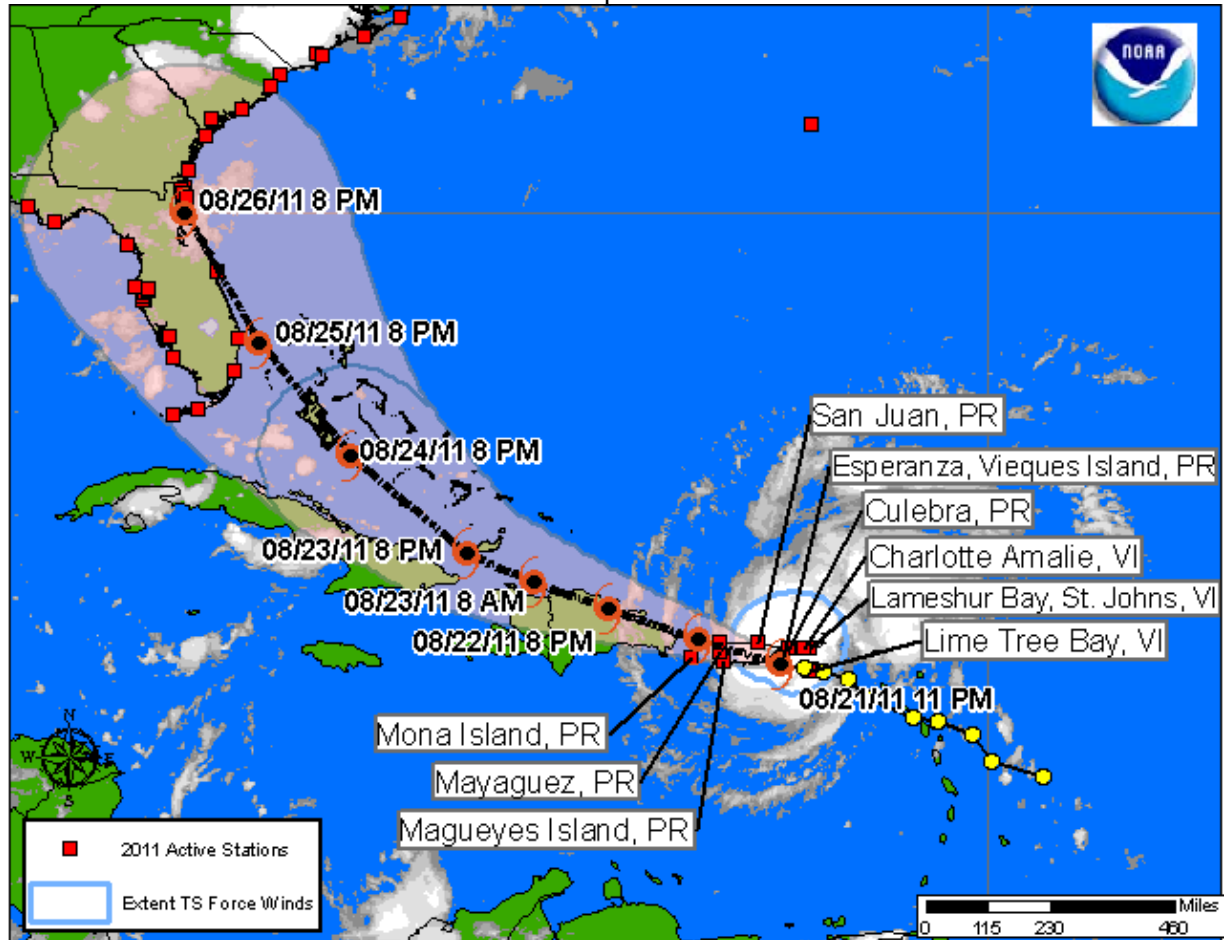




Tropical Storm IRENE QuickLook  
Posted: 00:00 AST 08/22/2011

NOAA and NOAA Partnership Stations Relative to the Storm



#### Storm Analysis

As of 08/22/2011 00:00 AST, water levels in the U.S. Virgin Islands and Puerto Rico are rising and range between 0.25 and 1.1 feet above predicted. Winds are increasing as well and range between 15 and 30 kts with gusts over 40 kts at many locations. Earlier this evening, Lime Tree Bay, VI reported a wind gust of 49 kts. Barometric pressure continues to fall across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

Culebra, PR: Next predicted high tides are 0.66 ft (0.20 m) at 08/22/2011 02:19 AST and 1.02 ft (0.31 m) at 08/22/2011 17:03 AST.

Esperanza, Vieques Island, PR: Next predicted high tides are 0.70 ft (0.21 m) at 08/22/2011 19:12 AST and 0.75 ft (0.23 m) at 08/23/2011 19:53 AST.

Tropical Storm IRENE QuickLook, POSTED 00:00 AST 08/22/2011

San Juan, PR: Next predicted high tides are 1.02 ft (0.31 m) at 08/22/2011 02:28 AST and 1.54 ft (0.47 m) at 08/22/2011 16:46 AST.

Magueyes Island, PR: Next predicted high tides are 0.82 ft (0.25 m) at 08/22/2011 20:14 AST and 0.85 ft (0.27 m) at 08/23/2011 20:43 AST.

Mayaguez, PR: Next predicted high tides are 0.55 ft (0.17 m) at 08/22/2011 02:59 AST and 0.81 ft (0.25 m) at 08/22/2011 16:31 AST.

Mona Island, PR: Next predicted high tides are 0.85 ft (0.26 m) at 08/22/2011 21:23 AST and 0.89 ft (0.27 m) at 08/23/2011 22:04 AST.

Charlotte Amalie, VI: Next predicted high tides are 0.87 ft (0.27 m) at 08/22/2011 18:18 AST and 0.924ft (0.29 m) at 08/23/2011 19:02 AST.

Lameshur Bay, St. John, VI: Next predicted high tides are 0.78 ft (0.24 m) at 08/22/2011 17:48 AST and 0.83 ft (0.25 m) at 08/23/2011 18:52 AST.

Lime Tree Bay, VI: Next predicted high tides are 0.82 ft (0.25 m) at 08/22/2011 20:20 AST and 0.88 ft (0.27 m) at 08/23/2011 20:49 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For information on Highest Astronomical Tide (HAT), NAVD88 and other datums, please see [Tidal Datums](#). For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst:PFF

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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

TROPICAL STORM IRENE ADVISORY NUMBER 6  
1100 PM AST SUN AUG 21 2011

...IRENE STRENGTHENING AS IT APPROACHES PUERTO RICO...

WATCHES AND WARNINGS  
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A HURRICANE WARNING IS IN EFFECT FOR...  
\* PUERTO RICO...VIEQUES...AND CULEBRA

A HURRICANE WATCH IS IN EFFECT FOR...  
\* U.S. VIRGIN ISLANDS

A TROPICAL STORM WARNING IS IN EFFECT FOR...  
\* U.S. VIRGIN ISLANDS

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING  
POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY

YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE.

#### DISCUSSION AND 48-HOUR OUTLOOK

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AT 1100 PM AST THE CENTER OF TROPICAL STORM IRENE WAS LOCATED ABOUT 50 MI WNW OF ST. CROIX AND ABOUT 50 MI SE OF SAN JUAN PUERTO RICO. IRENE IS MOVING TOWARD THE WEST-NORTHWEST NEAR 15 MPH. THIS GENERAL MOTION IS EXPECTED TO CONTINUE FOR THE NEXT COUPLE OF DAYS WITH A GRADUAL DECREASE IN FORWARD SPEED. ON THE FORECAST TRACK THE CENTER OF IRENE WILL MOVE NEAR OR OVER PUERTO RICO TONIGHT AND NEAR OR OVER THE DOMINICAN REPUBLIC ON MONDAY AND MONDAY NIGHT.

DATA FROM AN AIR FORCE RESERVE HURRICANE HUNTER AIRCRAFT INDICATE THAT MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 70 MPH WITH HIGHER GUSTS. SOME STRENGTHENING IS STILL POSSIBLE OVERNIGHT...AND IRENE COULD BECOME A HURRICANE BEFORE MOVING OVER PUERTO RICO IN THE NEXT FEW HOURS. SOME WEAKENING IS EXPECTED ON MONDAY AND MONDAY NIGHT AS THE CENTER MOVES NEAR OR OVER THE DOMINICAN REPUBLIC. SOME RESTRENGTHENING IS EXPECTED LATE TUESDAY AFTER THE CENTER MOVES OVER WATER.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 150 MILES FROM THE CENTER. A STATION AT SALT RIVER BAY ON ST. CROIX RECENTLY REPORTED A SUSTAINED WIND OF 47 MPH AND A GUST TO 57 MPH. ROOSEVELT ROADS NAVAL STATION ON PUERTO RICO RECENTLY REPORTED A WIND GUST TO 45 MPH.

THE LATEST MINIMUM CENTRAL PRESSURE MEASURED BY THE HURRICANE HUNTER AIRCRAFT WAS 993 MB...29.32 INCHES.

#### HAZARDS AFFECTING LAND

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WIND...TROPICAL STORM CONDITIONS ARE OCCURRING OR IMMINENT IN THE VIRGIN ISLANDS...EASTERN PUERTO RICO...CULEBRA AND VIEQUES...AND WILL CONTINUE TO SPREAD ACROSS PUERTO RICO TONIGHT. HURRICANE CONDITIONS ARE EXPECTED OVER PUERTO RICO...VIEQUES AND CULEBRA TONIGHT. THE HIGHEST WINDS ARE LIKELY TO OCCUR OVER AREAS OF ELEVATED TERRAIN.

RAINFALL...IRENE IS EXPECTED TO PRODUCE TOTAL RAINFALL ACCUMULATIONS OF 5 TO 10 INCHES ACROSS PUERTO RICO...THE VIRGIN ISLANDS...THE DOMINICAN REPUBLIC...HAITI...THE SOUTHEASTERN BAHAMAS AND THE TURKS AND CAICOS ISLANDS. ISOLATED MAXIMUM AMOUNTS OF UP TO 20 INCHES ARE POSSIBLE. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUD SLIDES IN AREAS OF STEEP TERRAIN.

STORM SURGE...A STORM SURGE OF 1 TO 3 FEET ABOVE NORMAL TIDE LEVELS IS EXPECTED ALONG THE COAST OF PUERTO RICO...AS WELL AS IN THE TROPICAL STORM WARNING AREA. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS WAVES.

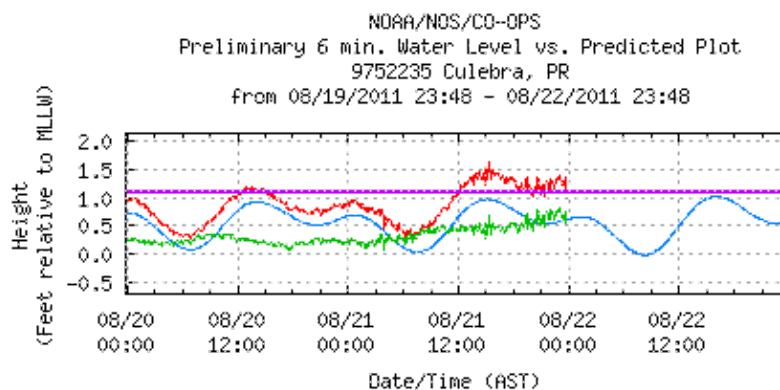
FORECASTER BRENNAN

## Tropical Storm IRENE QuickLook, POSTED 00:00 AST 08/22/2011

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [San Juan - Water Level](#), [San Juan - Winds](#), [San Juan - Barometric](#), [Magueyes Island - Water Level](#), [Magueyes Island - Winds](#), [Mayaguez - Water Level](#), [Mayaguez - Winds](#), [Mona Island - Water Level](#), [Charlotte Amalie - Water Level](#), [Lameshur Bay, St. John - Water Level](#), [Lime Tree Bay - Water Level](#), [Lime Tree Bay - Winds](#),

[Culebra, PR - Return to List](#)



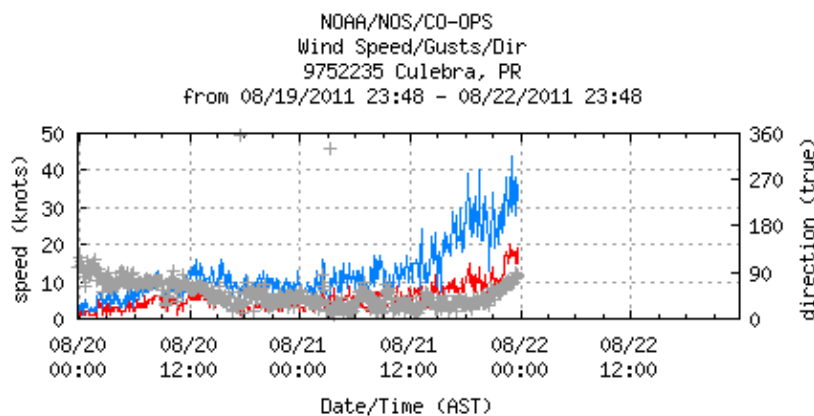
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 23:42 (AST)

Relative to MLLW: **Observed: 1.16 ft.** **Predicted: 0.61 ft.** **Residual: 0.55 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.85 ft. above MHHW

[Culebra, PR - Return to List](#)

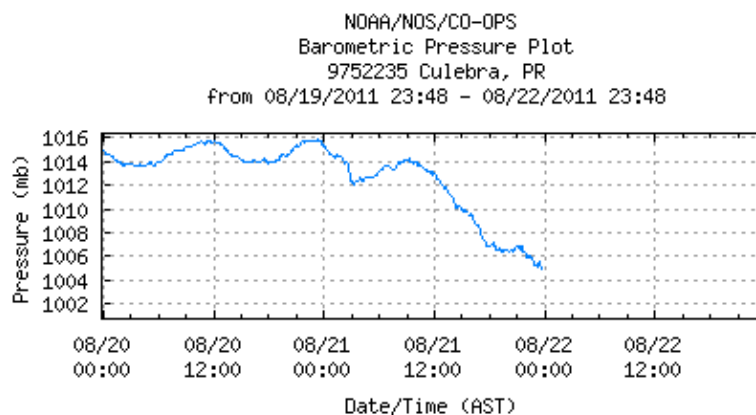


speed — gusts — direction +

Last Observed Sample: 08/21/2011 23:42 (AST)

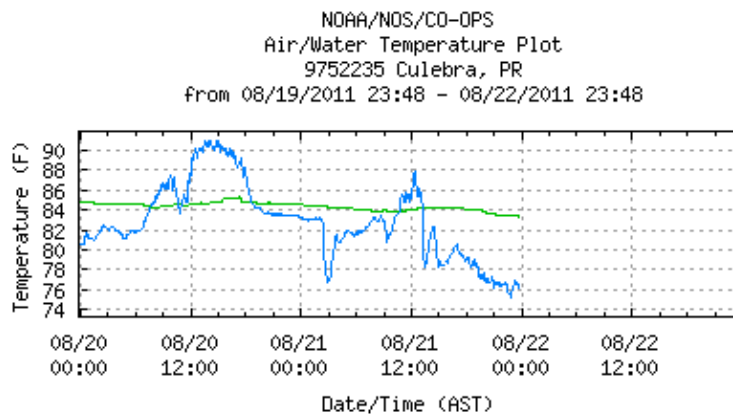
**Wind Speed: 15 knots** **Gusts: 36 knots** **Direction: 82° T**

[Culebra, PR - Return to List](#)



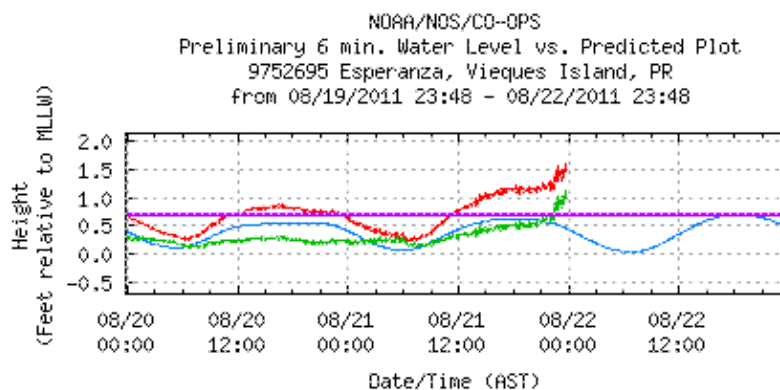
Last Observed Sample: 08/21/2011 23:42 (AST)  
[Barometric Pressure: 1005.0 mb](#)

[Culebra, PR - Return to List](#)



Last Observed Sample: 08/21/2011 23:42 (AST)  
[Water Temperature: 83.3° F](#) [Air Temperature: 76.1° F](#)

Esperanza, Vieques Island, PR - Return to List



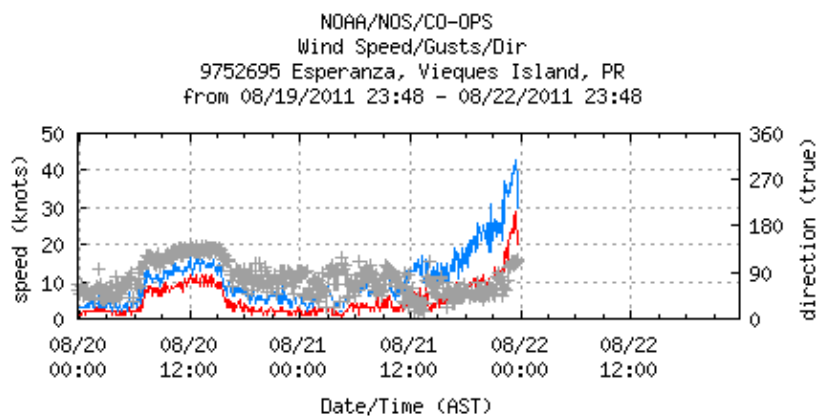
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 23:42 (AST)

Relative to MLLW: **Observed: 1.44 ft.** **Predicted: 0.46 ft.** **Residual: 0.98 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.84 ft. above MHHW

Esperanza, Vieques Island, PR - Return to List

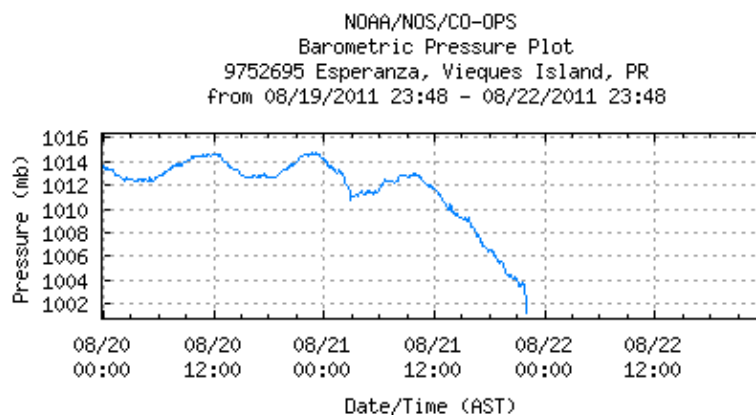


speed — gusts — direction +

Last Observed Sample: 08/21/2011 23:42 (AST)

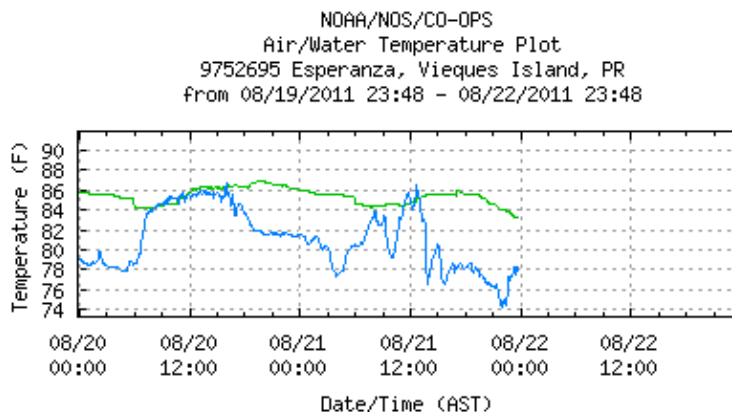
**Wind Speed: 20 knots** **Gusts: 30 knots** **Direction: 111° T**

[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 08/21/2011 22:06 (AST)  
Barometric Pressure: 1001.2 mb

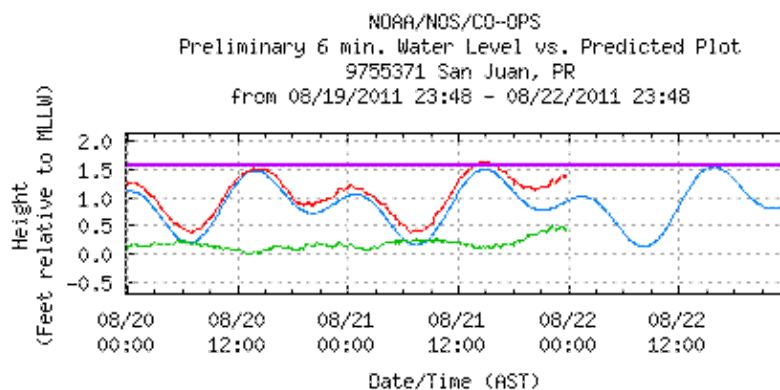
[Esperanza, Vieques Island, PR - Return to List](#)



Last Observed Sample: 08/21/2011 23:42 (AST)  
Water Temperature: 83.3° F Air Temperature: 78.3° F



San Juan, PR - Return to List

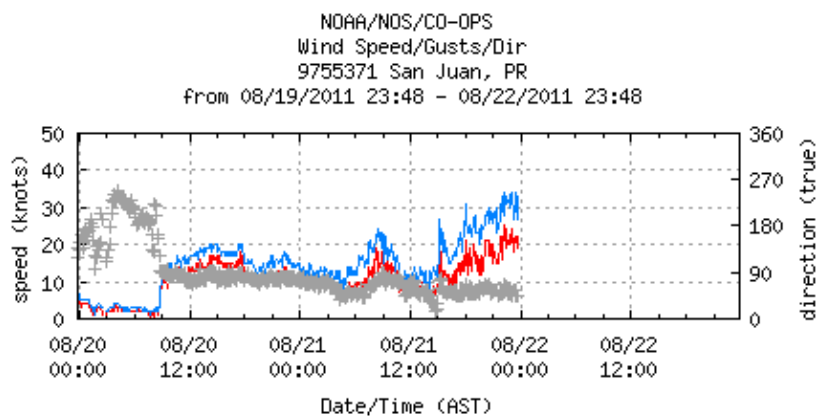


Last Observed Sample: 08/21/2011 23:42 (AST)

Relative to MLLW: **Observed: 1.35 ft.** **Predicted: 0.93 ft.** **Residual: 0.42 ft.**

Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above MHHW

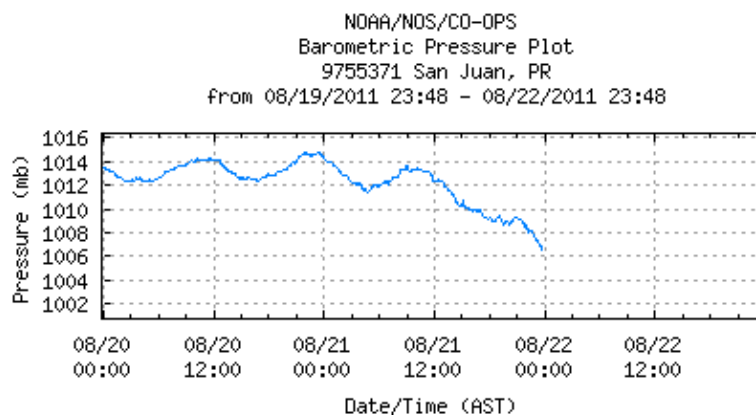
San Juan, PR - Return to List



Last Observed Sample: 08/21/2011 23:42 (AST)

**Wind Speed: 22 knots** **Gusts: 33 knots** **Direction: 46° T**

San Juan, PR - Return to List

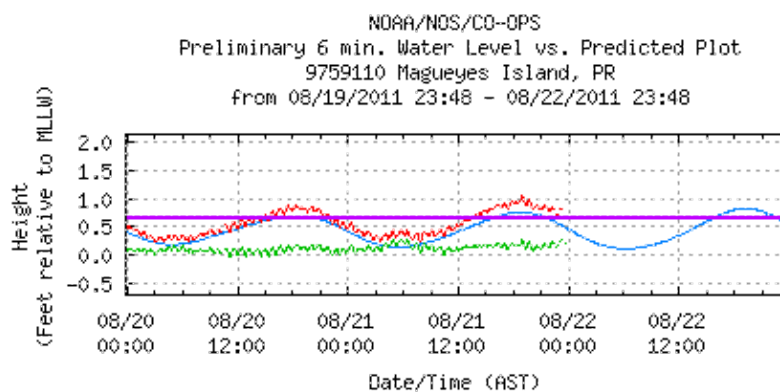


barometric pressure —

Last Observed Sample: 08/21/2011 23:42 (AST)

Barometric Pressure: 1006.6 mb

Magueyes Island, PR - Return to List



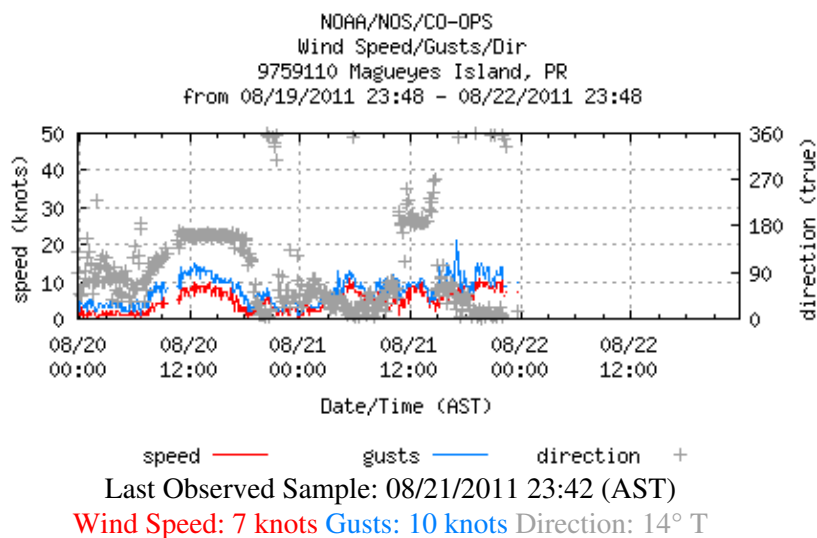
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 23:42 (AST)

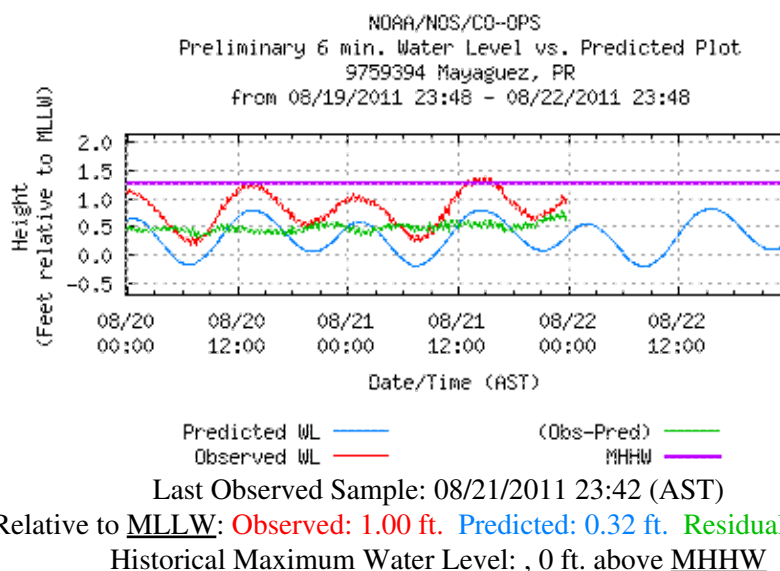
Relative to MLLW: Observed: 0.69 ft. Predicted: 0.48 ft. Residual: 0.21 ft.

Historical Maximum Water Level: Sep 22 1998, 1.6 ft. above MHHW

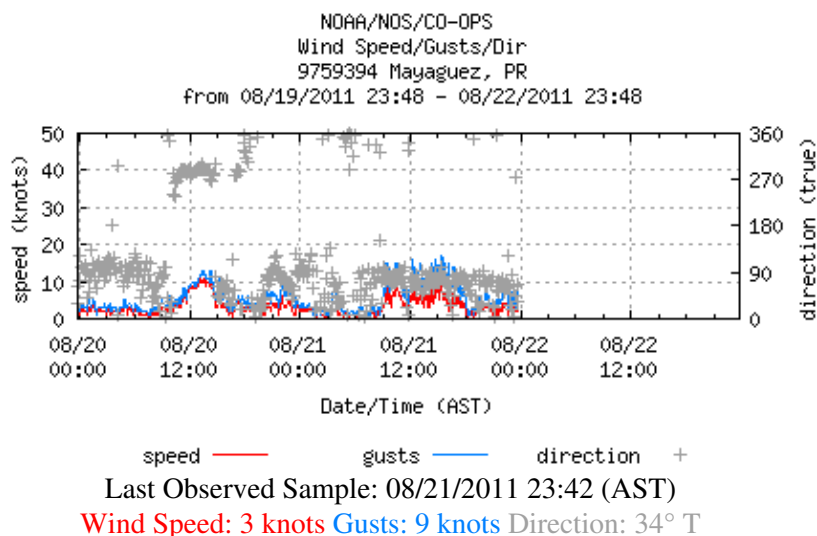
Magueyes Island, PR - Return to List



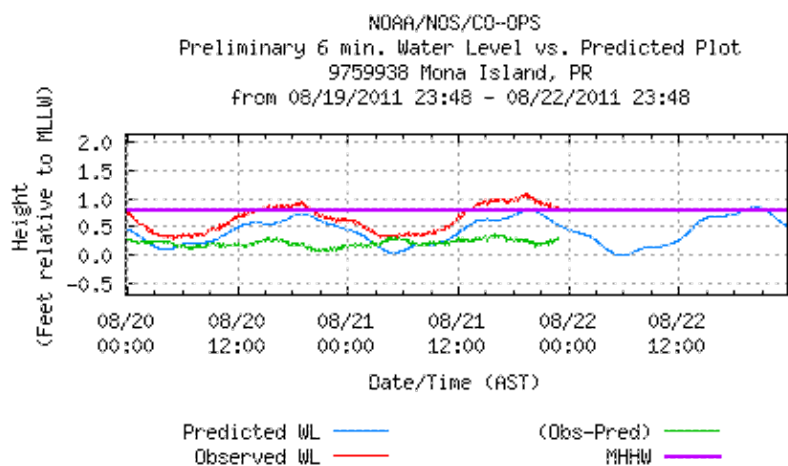
Mayaguez, PR - Return to List



Mayaguez, PR - Return to List

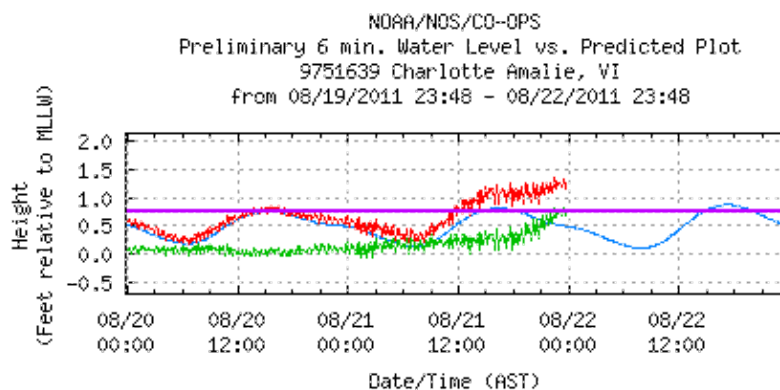


Mona Island, PR - Return to List



Last Observed Sample: 08/21/2011 22:54 (AST)  
Relative to MLLW: Observed: 0.82 ft. Predicted: 0.53 ft. Residual: 0.29 ft.  
Historical Maximum Water Level: Dec 23 2010, 1.26 ft. above MHHW

Charlotte Amalie, VI - Return to List



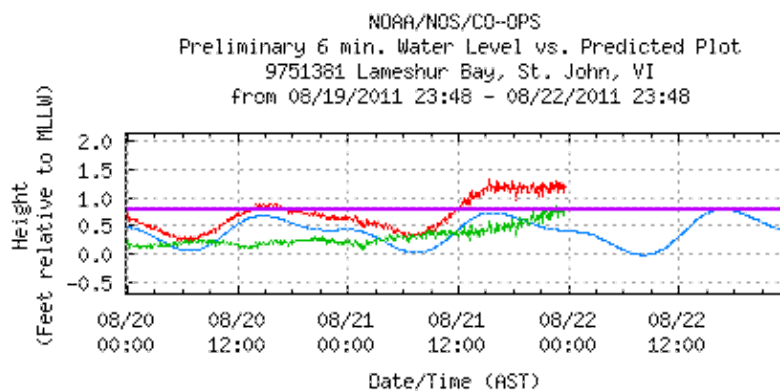
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 23:42 (AST)

Relative to MLLW: **Observed: 1.27 ft.** **Predicted: 0.49 ft.** **Residual: 0.78 ft.**

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above MHHW

Lameshur Bay, St. John, VI - Return to List



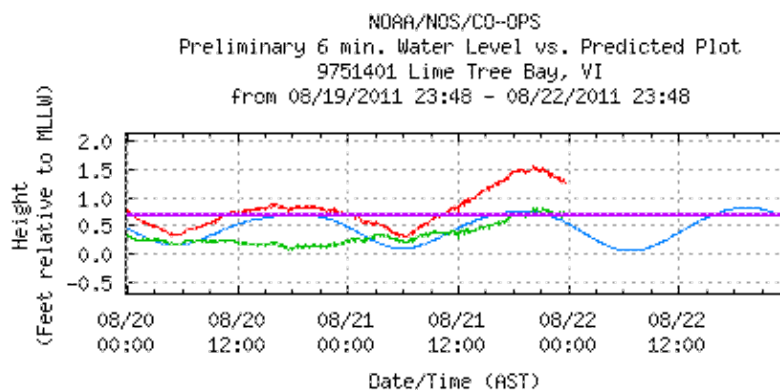
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 23:42 (AST)

Relative to MLLW: **Observed: 1.18 ft.** **Predicted: 0.41 ft.** **Residual: 0.77 ft.**

Historical Maximum Water Level: Aug 30 2010, 0.9 ft. above MHHW

Lime Tree Bay, VI - Return to List



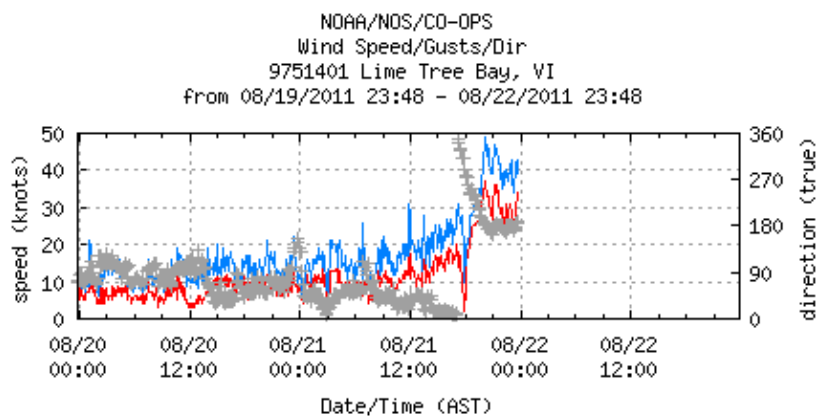
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/21/2011 23:42 (AST)

Relative to MLLW: **Observed: 1.25 ft.** **Predicted: 0.56 ft.** **Residual: 0.69 ft.**

Historical Maximum Water Level: Nov 17 1999, 1.88 ft. above MHHW

Lime Tree Bay, VI - Return to List



speed — gusts — direction +

Last Observed Sample: 08/21/2011 23:42 (AST)

**Wind Speed: 32 knots** **Gusts: 39 knots** **Direction: 184° T**

Tropical Storm IRENE QuickLook, POSTED 00:00 AST 08/22/2011

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce